

NOC:Symbolic Logic - Video course

COURSE OUTLINE

Logic is a part of every systematic field of inquiry As the essential foundation for rational investigation. Logic has always been a multidisciplinary and an interdisciplinary subject. Its versatility is evinced in its vast and varied applications in digital electronics, computer and manufacturing technologies, and also for deliberating in law, public policy and business strategy. In view of the above, it is a value-addition to one's skill-base to be exposed to this all-important subject.

Logic, roughly speaking, is the study of principles of correct reasoning. It is a foundational component for any systematic and rational investigation. It is a discipline that adds value to every other systematic field of inquiry.

This course is designed to enable the participants

- To gain acquaintance with the fundamentals of Propositional logic and Predicate Logic.
- To strengthen the foundation with problem-solving training.

COURSE DETAIL

Week	Topics
1.	Introduction to Logic, and to arguments.
2.	Propositional Logic: Syntax.
3.	Propositional Logic:Semantics. Truth table.
4.	Propositional Logic:Semantics. Truth Trees.



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Humanities and Social Sciences

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5.	Proofs and Derivations.
6.	Proofs with Limited Scope Assumption.
7.	Logic of Classes and Syllogisms.
8.	First Order Predicate Logic.

References:

Logic: Informal, Symbolic, & Inductive, C.Chakraborti, Prentice Hall of India, 2007. 2nd edition. ISBN:81-203-2855-8